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November 6, 1997

The Honorable Daniel S. Goldin
Administrator
National Aeronautics & Space Administration
Washington, DC 20546

Dear Mr. Goldin:

We are writing this letter to inform you of our views on two important potential reprogrammings of NASA funds.

The first is NASA's request in your letter of August 22, 1997, updating NASA's FY 1997 Operating Plan, to reallocate an additional $8 million to studies of Liquid Flyback Boosters (LFB). Since the Committee's original negative reply of September 24th, staff were briefed by Deputy Associate Administrator Steve Oswald and Chief Engineer Dan Mulville and provided much of the additional information that the Committee requested.

While we still have concerns about the LFB initiative, and about the allocation of resources among Phases II, III, and IV of the Shuttle Upgrades program we are prepared to approve the completion of the initial phase of the LFB study using up to $8 million in unspent FY 1997 funds. This approval is contingent upon NASA agreeing to the following constraints on and requirements for the study:

- NASA will present the complete results of this study to the House Committee on Science for our written concurrence before NASA requests funding for further LFB work.

- Based on the briefing to Committee staff on October 28th, it is presumed that NASA will deliver these study results to the Committee by March 31, 1998. An earlier delivery, however, would enable the Committee to include the results in our consideration of NASA's FY 1999 budget request.

- NASA should, as part of this study, identify multiple approaches for pursuing further LFB development, including the use of sub-scale, ground-based and flight demonstrations of experimental technologies which might reduce the technical risk of LFB development.

- No NASA funds shall be spent to study potential uses of the LFB other than as an upgrade to the Space Shuttle system. This includes LFB's role in "mass numlifter" or any other unauthorized initiatives which go beyond current Human Space Flight programs.

We would strongly encourage NASA to leverage the taxpayers' investment in this study activity with funds from the Space Flight Operations Contractor, which will presumably benefit substantially from the study itself, let alone any follow-up LFB development.

Even more importantly, we would like NASA management, in parallel with this study, to facilitate a continuing dialogue among the Administration, Congress, and other interested parties on the policy issues regarding privatization, commercialization, flight rate augmentation, and operational life extension of the Space Shuttle system. We are concerned about NASA's historical tendency to focus on hardware development without a resolution of policy concerns. Congress cannot fully consider or oversee, let alone approve, any further LFB development activity without an agreed-upon policy framework.

The second potential reprogramming relates to the topic of a Subcommittee on Space and Aeronautics hearing held on Friday, October 24th: NASA's "Fresh Look" study of Space Solar Power and the agency's apparent lack of plans to follow up on this important concept. The hearing – and especially the testimony of NASA's Dr. John Mankins – was very well received by Subcommittee Members from both parties. One Democratic Member, at the end of the hearing, declared to Dr. Mankins: "Don't let up. We're interested, and I think we'll be supporting what you're doing."

There was general agreement among witnesses and Members that one of NASA's top priorities should be developing space technologies with the potential for significant economic benefit to the nation, such as Space Solar Power. This is particularly important, in our view, to helping build political support in Congress for NASA's budget. Creating new space-based industries which directly benefit life on Earth is an easier sell than "spinoffs" from government-only space projects.

As testimony before the hearing pointed out, there is no inherent conflict between visionary ideas like Space Solar Power and human missions to Mars. We point out that on page 26 of NASA's new Strategic Plan, the Human Exploration and Development of Space Enterprise's Mission Statement includes these words: "Imagine commerce flourishing in space, with solar power satellites, or a Martian powerplant to permit a permanent colony."

Dr. Mankins was careful in his testimony to assert that the next step for Space Solar Power isn't a traditional NASA Phase A study or the creation of a project office. Instead, he suggested an in-depth analysis of the technologies and systems concepts identified in the Fresh Look study resulting in a robust technology maturation plan with solid costs and potential timetables, an effort taking no more than nine months. We would hope NASA could brief the Committee on interim

progress perhaps halfway through this follow-up activity, so as to have an impact on our consideration of NASA's FY 1999 budget.

According to Dr. Mulville, such an activity could cost around $1.5 million, not including industry participation. Therefore we would look favorably upon a reprogramming request from appropriate sources of up to $2 million for an immediate follow-up to the Fresh Look study.

While these two potential reprogramming requests are not directly related, we would be pleased to support short-term progress by NASA in both areas. Please get back to us as soon as possible as to how we can work together on them.

Sincerely,

F. JAMES SENSENBRENNER, JR.
Chairman

DANA ROHRABACHER
Chairman, Subcommittee on
Space and Aeronautics